

SCHOOL BUS SAFETY

From The Office Of State Auditor Claire McCaskill

Report No. 2003-35 April 15, 2003 www.auditor.state.mo.us



School bus safety relies on thorough driver screening and consistent bus inspections, but auditors found weaknesses in both areas

Current state law is supposed to prevent school bus driver applicants with felony convictions of disallowable offenses including: drug possession, assault, domestic violence and prostitution, from obtaining permits to drive school buses. But the law is not working, the background screening procedures are insufficient, and the state criminal information is incomplete. As a result, an indeterminate number of individuals with such felony convictions are allowed to work as licensed school bus drivers.

This audit analyzed school bus safety through driver screening and bus inspections. The audit work involved three agencies: Department of Revenue officials who license the drivers; Department of Elementary and Secondary Education staff who develop bus safety policies and standards, based on state law; and Missouri State Highway Patrol (highway patrol) officials who screen driver backgrounds and inspect buses.

Criminal records outside Missouri not checked on bus drivers

Background screenings for bus drivers do not include checks of criminal history information outside Missouri or of highway patrol's closed records. Highway patrol officials need a driver's fingerprint to complete these checks, but fingerprints are not currently required of bus applicants. Auditors ran 386 drivers against highway patrol's criminal history records and found 60 with convictions or charges of disallowable offenses. Of these 60 drivers, 14 had conviction information in closed records, which the highway patrol will not make available without a fingerprint. Department of Revenue officials said they would have denied the school bus permit applications if they had received the closed record information. (See page 4)

Child abuse and neglect databases not used to screen drivers

Department of Revenue officials do not currently run bus driver applicants through the child abuse and neglect database because the data does not include criminal convictions. Other state agencies, including the Bureau of Child Care, use the database in deciding to license individuals operating or working in child care centers. Auditors checked about 21,000 drivers against the child abuse database and found 330 obtained bus permits after state officials substantiated abuse and neglect complaints. Childcare bureau staff reviewed abuse complaints of 15 drivers and said they would be concerned about the safety of children with 8 of the 15 drivers. (See page 4)



Incomplete statewide criminal data allowed licensing of some convicted drivers

Auditors gave Kansas City police officials the names of 700 school bus drivers to match against their criminal data system and found 14 drivers with convictions of disallowable offenses. Of these 14, 13 were convicted before applying for bus permits. Highway patrol officials said the Kansas City police never forwarded the criminal information to the highway patrol. In January 2003, state officials revoked the permits of these 14 drivers. (See page 5)

Spot inspections of school buses could increase safety

Spot inspections conducted by five highway patrol troops in 2002 showed some operators conducted incomplete inspections. State law requires inspections of each school bus twice a year, with one inspection by highway patrol officials. Bus operator employees licensed to inspect often conduct the second review. A spot inspection is in addition to the two required inspections and is often unannounced. Among four spot inspections conducted by two patrol troops, officials failed 22 buses and restricted 6 of these 22 from service due to serious defects. In two cases, the spot inspections occurred 2 and 15 days after the bus operator's self-inspection. The highway patrol could use results of required inspections to focus spot checks on operators with repeatedly poor inspections. (See page 8)

Increased costs of adding seat belts to buses is unknown in Missouri

Children are eight times safer riding to school in buses than in cars with their parents, according to an April 2002 national report analyzing seat belts in buses. This national study concluded the overall benefit of requiring seatbelts in large buses did not warrant a mandated federal standard to install them. The study also cautioned the costs of mandating belts could discontinue bus transportation for some children and increase their risk of injury. Missouri, as most states, does not mandate installing seat belts in large school buses. If state officials wanted to consider the potential costs of installing seat belts in buses, they would have to develop cost data by tracking the number of large school buses in the state and the average daily occupancy rates. (See page 12)

All reports are available on our website: www.auditor.state.mo.us

SCHOOL BUS SAFETY

TABLE OF CONTENTS

		<u>Page</u>
ST	TATE AUDITOR'S REPORT	1
RI	ESULTS AND RECOMMENDATIONS	3
1.	State Laws and Incomplete Statewide Criminal Information Allowed Convicted Fel- Obtain School Bus Permits	
	Conclusion	
2.	Improvements are Needed in the School Bus Inspection Program	8
	Conclusion	
3.	Installing Lap/Shoulder Belts on School Buses Could Improve Safety, But Cost Cou Substantial	
	Conclusion	
Al	PPENDIXES	
I.	SCOPE AND METHODOLOGY	17
II.	. AGENCY COMMENTS	19
	ABBREVIATIONS	
	DESE Department of Elementary and Secondary Education DOR Department of Revenue DSS Department of Social Services FBI Federal Bureau of Investigation	



CLAIRE C. McCASKILL

Missouri State Auditor

Honorable Bob Holden, Governor
and
Members of the General Assembly
and
Charles R. Jackson, Director
Department of Public Safety
and
Carol Russell Fischer, Director
Department of Revenue
and
D. Kent King, Commissioner
Department of Elementary and Secondary Education
and
Colonel R.D. Stottlemyre, Superintendent
Missouri State Highway Patrol
Jefferson City, MO 65102

Approximately 500,000 Missouri children are transported each year on school buses at public expense. This report focuses on the state's oversight and safety of school buses. Our objectives were to determine 1) the effectiveness of background screening on individuals applying for permits to drive school buses, 2) the timeliness and effectiveness of school buses safety inspections, and 3) if installing seat/shoulder belts on school buses would increase passenger safety.

Missouri school bus safety oversight rests within three state agencies—the Departments of Elementary and Secondary Education, and Revenue, and the Missouri State Highway Patrol. This oversight includes establishing safety standards for school buses, issuing and suspending permits to drive school buses, and inspecting school buses to ensure they are in safe operating condition.

We found (1) state laws, procedures, and statewide criminal information need improvement to ensure school bus drivers do not have disqualifying criminal histories, and (2) a systematic Missouri State Highway Patrol spot inspection program is needed to ensure all school bus operators thoroughly inspect their buses. In addition, a recent federal study shows mandating lap/shoulder belts on all school buses could reduce injuries for some children in school bus accidents. However, more information is needed to assess the situation in Missouri.

We conducted our work in accordance with applicable standards contained in *Government Auditing Standards*, issued by the Comptroller General of the United States, and included such tests of the procedures and records as were considered appropriate under the circumstances. Appendix I contains our scope and methodology.

Claire McCaskill State Auditor

Die McCashill

The following staff contributed to this report:

Director of Audits: Kirk R. Boyer

Audit Manager: John B. Mollet, CISA Auditor-In-Charge: Benjamin Douglas Audit Staff: George M. Atkinson

RESULTS AND RECOMMENDATIONS

1. <u>State Laws and Incomplete Statewide Criminal Information Allowed Convicted Felons to Obtain School Bus Permits</u>

Inadequate state laws and procedures, and lack of complete statewide criminal information has enabled an indeterminate number of individuals, who were convicted for such offenses as drug possession, assault, domestic violence, and prostitution, to obtain permits to transport Missouri children to and from school. We found school bus drivers that had several of these convictions, while others operated school buses with invalid permits. Individuals convicted of or pled guilty to disallowable offenses were able to obtain school bus permits for several reasons, including 1) state laws that do not require school bus permit applicants to submit fingerprints with their applications, 2) Missouri State Highway Patrol's¹ (highway patrol) policy to not release certain criminal information without fingerprints, and 3) lack of complete information on applicants' criminal history. School bus drivers with suspended permits can continue to drive due to the absence of state laws or regulations that require school bus operators to periodically verify valid permits.

State law requires criminal background screening for school bus permit applicants

State law prohibits individuals from obtaining permits to drive school buses if they were found guilty or pled guilty to certain disallowable criminal offenses such as assaults, child molestation, prostitution, and drug violations.² Under the law, the Department of Revenue (DOR) must obtain criminal history clearances from the highway patrol and/or the Department of Social Services (DSS) before issuing school bus permits to applicants. The highway patrol reviews its open records and informs DOR if the applicant has been convicted of any disallowable offenses. However, because state law does not require applicants to submit fingerprints, the highway patrol will not provide DOR criminal history data for disallowable offenses from its closed case files, without the submission of fingerprints. According to a highway patrol official, due to problems with identity theft, alias information, and lack of positive identification, the patrol requires fingerprints before it will release information contained in closed records. The official said the highway patrol could be subject to lawsuits if it released erroneous information from closed records

State law also authorizes the highway patrol to obtain criminal history information from the Federal Bureau of Investigation (FBI), which shows convictions of disallowable offenses in other states. However, because the FBI requires fingerprints to query its national criminal history database, the highway patrol cannot determine if applicants were convicted of disallowable offenses outside of Missouri. Finally, highway patrol officials are required by law to notify DOR if they become aware of any applicants who obtained permits, but were later convicted of a disallowable offense. But a highway patrol official said the patrol does not have any means of tracking school bus drivers for subsequent conviction information. To track subsequent convictions for active school bus drivers, the patrol official said they would need 1) the drivers' fingerprints and 2) an automated applicant identification system that could

.

¹This agency is part of the Department of Public Safety.

²Sections 203.272.5(2), 202.272.5(3), and 302.272 6, RSMo 2000.

automatically flag when drivers received subsequent disqualifying convictions. The patrol estimates such a system would cost about \$2.5 million, but could be paid for with fees the patrol charges for background clearances.

Presently, DOR conducts follow-up clearances on individuals renewing school bus permits every 3 years. To help ensure convicted felons cannot obtain permits to drive school buses, DOR has proposed changes to state law to require all individuals applying for school bus permits to submit fingerprints.

Some school bus drivers had substantiated complaints related to child abuse and neglect

From a list of about 21,000 school bus drivers, DSS identified 386 school bus drivers who had substantiated complaints of child abuse or neglect. Highway patrol officials took these 386 drivers and found 60 of them also had been convicted or charged with disallowable offenses, as shown in Table 1.1.

Table 1.1: Types of Disallowable Offenses for 60 School Bus Drivers

Disqualifiers	Drug	Against the Person ¹	Sexual Assault	Prostitution	the	Robbery, Arson, Burglary		Total
Open record	1	1	1	0	1	2	0	6
Closed record	5	1	1	1	0	3	3	14
Unknown dispositions	8	6	5	0	11	4	6	40

¹Offenses include assault, manslaughter and kidnapping.

Source: Missouri State Highway Patrol Criminal Records Division.

Our analysis showed the six individuals with open record convictions were convicted after obtaining their school bus permits, but before the permits were renewed. For the 14 individuals with convictions listed in closed record files, DOR officials stated they would have denied the school bus permit applications if they had received the information. However, highway patrol officials will not release such closed record information to DOR without a driver's fingerprint, and current state law does not require state officials to obtain drivers' fingerprints.

Forty applicants charged with a disallowable offense obtained school bus driver permits. In these cases, the highway patrol had not received final disposition information on their charges, such as whether the applicants were found guilty or innocent. DOR officials said, under existing state laws, they cannot deny applicants a school bus permit if they have only been charged with a disallowable offense and there is no final disposition. DOR officials said if the highway patrol informs them an applicant has been charged with a disallowable offense and the final disposition is not available, DOR will issue the applicant a temporary permit until the final disposition is known. If the applicant is found guilty or pleads guilty, the permit is revoked. However, DOR does not require school bus permit applicants to disclose on their permit application forms if they are currently charged with a disallowable offense. Accordingly, if the charge and final

²Offenses include abandonment of a child, endangering the welfare of a child, and child abuse.

disposition information is not reported to the highway patrol, the applicants can continue to drive school buses even if they are subsequently found guilty.

According to DOR officials, the department has not requested background clearance through DSS' child abuse and neglect database because the data does not include criminal convictions. That is, these complaints may not result in criminal convictions even though DSS staff may have investigated and substantiated them, or the cases may have been adjudicated in family court. Other state agencies, such as the Bureau of Child Care,³ use the DSS database in deciding whether to license individuals operating or working in child care centers. However, current state law regarding school bus drivers only allows DOR to deny permits to applicants who were convicted or pled guilty to certain disqualifying criminal offenses.

Of the 386 school bus drivers, 330 obtained school bus permits after child abuse or neglect complaints were substantiated by DSS. DSS data showed the severity of the child abuse or neglect complaints ranged from mild to fatal as shown in Table 1.2.

Table 1.2: School Bus Permits Issued After Substantiated Child Abuse or Neglect Incidents

Severity of Incident	Number
Unknown	3
Mild	61
Moderate	153
Serious/Severe	110
Permanent Damage	1
Fatal	2
Total	330

Source: Prepared by SAO based on DOR and DSS data.

According to a Bureau of Child Care official, child care license applications can be denied based on information contained in the DSS database, even if the individual has not been convicted of a criminal offense. We asked bureau staff to review information provided by the DSS for 15 of the 386 school bus drivers.⁴ A bureau official responded the agency would be concerned about the safety of children riding with 8 of the 15 drivers. Also, the official said a child care license would probably be denied if these individuals applied for a license or remained employed at the child care facility.

Lack of complete statewide conviction information resulted in individuals with disallowable offenses obtaining school bus permits

We provided the Kansas City police department a list of about 700 school bus drivers to match against its criminal information system. This match identified 14 of the 700 school bus drivers

³This bureau is part of the Department of Health and Senior Services, Division of Health Standards and Licensure.

⁴We selected these 15 drivers because they involved fatalities, permanent injuries or the cases had been adjudicated in a family or juvenile court.

had been convicted for disqualifying offenses in the Kansas City metropolitan area, and 13 of the 14 individuals had been convicted before they applied for school bus permits.

DOR officials said the highway patrol did not provide them disqualifying criminal history data on the 13 drivers when clearance data was requested. According to highway patrol officials, the Kansas City arrest and disposition information was never forwarded to the highway patrol, and therefore could not be provided to DOR. The other individual was convicted after obtaining a school bus permit and, therefore, was not identified in the patrol's background screening process. DOR officials concurred the drivers should not have school bus permits under state law, and, in January 2003, revoked the 14 drivers' school bus permits.

Lack of periodic checks allows drivers with suspended permits to continue driving

Some school bus drivers with suspended or expired drivers licenses were continuing to operate school buses. State law provides if an individual's drivers license is suspended, their school bus permit is invalid and they are not authorized to drive a school bus. We identified nine drivers with suspended or expired drivers licenses from about 3,700 school bus drivers currently working for 26 school bus operators. In addition, DOR records showed only 28 of 267 drivers returned suspended licenses to DOR from July 1, 2001 through November 21, 2002 as required by law. Two factors allowed these drivers to continue driving. First, state laws and regulations do not require school bus operators to periodically verify the validity of drivers licenses and/or school bus permits. Second, most drivers did not comply with the law requiring individuals to return suspended licenses to DOR. DOR officials said they do not have sufficient staff to monitor whether suspended licenses are returned and issue follow-up letters.

Conclusion

invalid permits. To help ensure children's safety, state laws prohibit persons who have disqualifying criminal offenses from obtaining permits to drive school buses. However, the laws and incomplete statewide criminal history data have allowed some school bus permit applicants with disqualifying criminal offenses to obtain school bus permits. Current state laws do not require school bus permit applicants to submit fingerprints. The highway patrol needs applicants' fingerprints to conduct a comprehensive search of all of its criminal records—both open and closed records—for disqualifying offenses. In addition, DOR's application does not request applicants to report if they are currently charged with these offenses. With this information, DOR could request applicants to provide either the final disposition or current status of any charges to determine whether the applicant is eligible for a school bus permit. And finally, state laws have allowed individuals whose permits were suspended or expired to continue to drive school buses.

Some Missouri school children are being transported by drivers with criminal histories and

_

⁵We provided DOR and the involved school bus operators the names of these drivers so they could take appropriate follow-up actions.

Recommendations

We recommend the General Assembly:

- 1.1 Require current and potential school bus drivers to submit fingerprints with their permit renewal applications or first-time permit applications.
- 1.2 Require school bus operators to submit the names and other necessary information of their drivers to DOR every six months to verify the validity of bus driver permits.

We recommend the Director, Department of Revenue:

1.3 Revise the school bus permit application form to require applicants to report whether they are currently charged with any disallowable offenses, including the date and location of the charges, and to provide DOR current information on the status of their charges.

Department of Revenue Comments

1.3 The department is agreeable to changing the form; however, disclosure of the information is dependent on self-reporting by the applicant. The department has no enforcement power to ensure current charges are reported. Further, the department may only deny a school bus permit on a plea or finding of guilty.

2. <u>Improvements are Needed in the School Bus Inspection Program</u>

Highway patrol data showed that a majority of school buses passed safety inspections in 2000, 2001, and 2002. However, the data also showed that about 300 school bus operators had average failure rates exceeding 25 percent. The highway patrol conducted limited school bus safety spot inspections between August and October 2002 because of lack of resources and a statewide systematic spot inspection program. During the limited inspections, the patrol identified 32 school buses with safety defects even though these buses purportedly passed recent operator-conducted safety inspections. The highway patrol's follow-up inspections, which occurred six to eight months after the operator-conducted inspections, did not ensure school bus operators inspected all their school buses as required by law.

School buses are required to be inspected twice a year

To ensure school children's safety, state law⁷ requires every school bus to be inspected twice a year. For the first inspection, school bus operators are required to have their school buses inspected within 60 days before the school year begins. Some operators with employees licensed to inspect school buses inspect their own buses, while other operators use private vehicle inspection stations. Highway patrol officials conduct the second inspection of all buses close to the end of the school year—typically beginning in February.

Each inspection requires a number of specified items on the bus such as brakes and fuel systems to be inspected, properly fitted and in good working order. Certain defects, such as malfunctioning signal lights, result in buses not passing the highway patrol inspection, but the buses can continue operating. The operators have 10 days to make repairs and report to the patrol repairs were made. Serious safety defects with the steering, suspension or brakes and any fuel leaks, result in school buses being immediately taken out of service. School bus operators have to take these buses back to the highway patrol for re-inspection before they can be placed back into service.

A systematic spot inspection program could help improve school bus safety

Spot inspections conducted by five highway patrol troops in 2002 indicated some school bus operators were not conducting complete safety inspections as required by law. Two troops conducted four spot inspections at school districts after complaints were filed in August 2002. These troops found 22 buses did not pass inspection and 6 of the 22 buses were restricted from service due to serious safety defects. In one case, the spot inspections occurred 2 days after the school bus operator's self inspection. In another case, the spot inspection occurred less than 15 days after the self inspection. Three other troops conducted spot inspections in October 2002 and found 10 buses did not pass inspection: one of the buses was pulled out of service due to serious defects. Two of the three troops' spot inspections were based on complaints and the third troop was based on a random spot inspection, which found six of eight buses inspected could not pass inspection.

-

⁷Sections 304.050 and 307.350 to 307.390, RSMo 2000.

The highway patrol has not implemented a systematic spot inspection program. Instead, each troop determined whether to conduct spot inspections. We found only one troop conducted a random spot inspection in 2002, and these were limited due to insufficient staff. The other eight troops only conducted spot inspections when they received complaints or allegations that school bus operators have not properly inspected their buses. Several of the troops' chief inspectors said they believe spot inspections are necessary to ensure school bus operators inspect their buses according to law and school buses are safe. One chief inspector said he believes the highway patrol should implement a mandatory spot inspection program of school buses and require each troop to spot inspect a specified percentage (for example 5 percent) of school buses within their jurisdiction. The inspector also said most chief patrol inspectors agree more spot inspections need to be done, but expressed concern over the lack of staff to implement a mandatory spot inspection program.

Highway patrol could use current inspection data to focus spot inspection program

About two-thirds of the bus operators representing 86 percent of the buses had failure rates of 25 percent or less. The remaining 38 percent of the operators representing 14 percent of the buses failed over 25 percent of the inspections. Highway patrol officials agreed there continue to be a number of school bus operators with poor inspection results. Table 2.1 shows the three-year average failure rates for all school bus operators the highway patrol inspected between 2000 and 2002.

Table 2.1: Three Year Average School Bus Inspection Results

Inspection	Number of		Number of	
Failure Rates	Operators	Percent	Buses	Percent
0-10%	307	39	7,393	60
11-25%	176	22	3,243	26
26-50%	200	25	1,363	11
51-75%	66	8	203	2
76-100%	37	5	97	1
Totals	786	99	12,299	100

Note: Percentages do not sum to 100 due to rounding.

Source: Prepared by SAO based on highway patrol data.

The highway patrol has not used annual inspection results to focus spot inspections in order to make more effective use of its limited resources. Chief inspectors from two troops said if they had more staff they would focus spot inspections on school bus operators which had higher than average inspection failure rates based on inspections the troop conducts in February and March each year.

The highway patrol cannot use DOR data to ensure all buses were inspected properly

DOR does not have reliable data showing the number of school buses operating in the state. Highway patrol data shows it inspected 12,129 school buses in February and March 2002, whereas DOR data shows 17,049 school buses were registered with the state as of December 31,

2002. To determine what buses to inspect, each highway patrol troop inspection unit requires all school districts to provide the patrol a current list of buses they are operating, and requires the operators to sign a form attesting all their buses were inspected. Highway patrol officials acknowledged that relying on operators' data does not provide complete assurance all buses were inspected, but it is the best data available. DOR officials said its school bus data does not accurately reflect the actual number of school buses operated within the state because the registration system is not routinely purged of buses no longer in use in the state. They also said maintaining an accurate school bus database would be difficult when buses are sold to someone in another state because DOR does not receive information on these sales. In addition, they noted that bus operators do not always provide registration information, as they should.

Conclusion

The highway patrol's data shows a majority of school buses are safe. However, highway patrol spot inspections and inspection data indicate not all school bus operators inspected their buses in accordance with state law and regulations. DOR cannot provide the highway patrol accurate statewide school bus registration information to ensure all school buses are inspected as required by laws.

Recommendations

We recommend the Superintendent, Missouri State Highway Patrol:

2.1 Develop and implement a systematic spot inspection program designed to ensure school bus operators conduct quality inspections.

We recommend the Director, Department of Revenue:

2.2 Improve the school bus registration system to accurately capture the current registration status for buses transporting children throughout the state.

Missouri State Highway Patrol Comments

2.1 I certainly appreciate the fact that, along with this recommendation, the audit results included that spot checks of school buses are currently being conducted by our personnel. The recommendation, as listed above, will be given the appropriate consideration, and will be placed as an item on the agenda for the next School Bus Committee meeting.

Department of Revenue Comments

2.2 The department maintains an accurate and reliable General Registration System, as it is our responsibility to update the system with information provided to us by vehicle owners. The department relies on vehicle owners to voluntarily notify us when selling or trading a vehicle, so that the registration system can remain current. A change in Missouri law would be necessary to require vehicle owners to notify the department when they sell or

trade a vehicle out-of-state. This would allow the department to track all vehicles more thoroughly.

The department will provide the Missouri State Highway Patrol (MSHP) with a list of current and expired vehicle registrations for each school bus company for use in conducting inspections. The MSHP could use this list to document any school buses with non-current registrations. This will assist the department in updating our registration system and ensuring the school bus registration information remains current.

3. <u>Installing Lap/Shoulder Belts on School Buses Could Improve Safety, But Cost Could Be Substantial</u>

Missouri, as most states, does not mandate the installation or use of seat belts in large school buses. A national report showed if lap/shoulder (i.e., 3-point) seat belts were installed and properly used in school buses they could prevent some deaths and serious injuries resulting from school bus accidents. Highway patrol data shows about 500 children were injured in school bus accidents in 2001, with no occupant fatalities. However, the national study did not quantify the number of injuries that could be prevented by the use of 3-point belts and therefore it is not possible to accurately quantify how many of the 500 injuries may have been prevented by 3-point belts. Although numerous children are injured annually in school bus accidents, the report noted students were nearly eight times safer riding in a school bus than they were riding with their own parents in cars. The report also noted mandating the installation of 3-point belts in all school buses could significantly increase school transportation costs, which could result in discontinuing school bus service for some children and increase their risk of injury. However, no Missouri data is available to accurately compute potential costs.

Mandating seatbelts in all school buses may improve safety

School buses are considered to be the safest means of transporting children to and from school. A National Highway Traffic Safety Administration (safety administration) 2002 report stated large school buses equipped with 3-point seatbelts would potentially save one life each year nationwide and reduce injuries incurred in frontal crashes of school buses. However, the report did not quantify a reduction in the number of injuries and stated any potential benefits realized in lives saved or injury reduction required 100 percent proper use of 3-point belts. The report noted that improperly used 3-point belts could result in severe neck and abdominal injuries. Based on the report, the safety administration concluded the overall potential benefit of requiring seatbelts in large school buses did not warrant a federal standard mandating them.

The national report noted the fatality rate for school buses is only 0.2 fatalities per 100 million vehicle miles traveled compared to 1.5 fatalities per 100 million vehicle miles traveled for cars, or nearly 6.5 times less. The report also noted that while not quantifiable, there would also be a companion reduction in the number of injuries in frontal crashes. Additionally, the report stated properly used 3-point seat belts have the potential to be effective in reducing fatalities and injuries in other (non-frontal) crashes, and belt systems are particularly effective in reducing ejection in rollover crashes.

Nevertheless, the report cautioned that mandating 3-point belts could result in eliminating school bus transportation for some children thereby requiring them to either walk to school or be transported by their parents—both of which are considered more dangerous forms of transportation. The report stated that even a small reduction in the number of children provided

⁸<u>Report To Congress - School Bus Safety: Crashworthiness Research</u>, U.S. National Highway Traffic Safety Administration, April 2002. State data were not available to estimate the number of injuries that may have been prevented by installing 3-point seat belt systems.

free school bus transportation could result in more children being killed or injured when using alternative forms of transportation.

Missouri State Highway Patrol school bus accident data shows an average of 400 occupant injuries each year from 1990 to 2000, and two occupant fatalities during that period (the latest fatality occurring in 1999). The national study, however, cannot be used to accurately determine if 3-point belts would have prevented the two fatalities or quantify the number of injuries that may have been prevented. As a result, neither we nor the highway patrol can estimate to what extent 3-point belts may reduce the number of fatalities and injuries on Missouri school buses.

Mandating 3-point seat belts would likely increase school transportation costs

Information provided by one seat manufacturer shows installing 3-point seat belts results in reducing seating capacity on a typical large school bus from 72 children to 60 children, or about a 17 percent loss in seating capacity. In addition, installing the 3-point belts would increase the cost of a new school bus by about 10 percent from about \$64,000 to \$70,000. Accordingly, mandating 3-point seat belts on all new school buses would result in substantially increasing school transporting costs—especially for school districts with increasing enrollments.

An accurate estimate on the potential cost of 3-point seat belts is not possible. According to Department of Elementary and Secondary Education (DESE) officials, the department does not have data on the number of large school buses operating in the state, or the average daily occupancy rates. Without this data, an accurate projection is not possible on whether school districts would have to either procure additional buses, or discontinue free school bus transportation for some children, which could increase the risk of injury.

To illustrate the potential cost of equipping buses with 3-point seatbelts, we used three assumptions. First, implementing a 3-point seatbelt requirement would only be incremental as buses are replaced rather than replacing the state's entire fleet of buses at one time. Second, since approximately 85 percent of the school bus operators only account for about 30 percent of the buses, we use an example of an operator with a small fleet of 10 buses. And third, our estimate assumes each bus has maximum daily capacity. Given these assumptions, Table 3.1 shows the overall impact on a school district that may be operating 10 large school buses. Such a district may likely need 12 buses equipped with 3-point belts to maintain the same seating capacity as large buses without seatbelts. The overall cost of about \$205,000 would most likely be spread over a number of years as buses are replaced with new ones.

⁹According to the seat manufacturer, it currently cannot retrofit old school buses with 3-point seat belts because the flooring in older buses was not designed for the new seats equipped with 3-point belts and may not be strong enough to accommodate them.

Table 3.1: Potential Replacement Cost of 3-Point Seat Belts
For An Operator With 10 School Buses

]	Buses withou	t Seatbelts	Buses witl		
Bus	Cost	Seating	Cost	Seating	Difference
1	\$64,000	72	\$70,400	60	\$6,400
2	64,000	72	70,400	60	6,400
3	64,000	72	70,400	60	6,400
4	64,000	72	70,400	60	6,400
5	64,000	72	70,400	60	6,400
6	64,000	72	70,400	60	6,400
7	64,000	72	70,400	60	6,400
8	64,000	72	70,400	60	6,400
9	64,000	72	70,400	60	6,400
10	64,000	72	70,400	60	6,400
11			$70,400^{1}$	60	70,400
12			70,4001	60	70,400
	\$640,000	720	\$844,800	720	\$204,800

¹These costs represent two additional buses needed to maintain original capacity when equipped with seat belts.

Source: Prepared by SAO based school bus manufacturer cost estimates.

Most states do not require school buses to be equipped with seat belts

None of Missouri's eight contiguous states require large school buses to be equipped with seat belts. According to the National Highway Traffic Administration, only four states (California, Florida, New Jersey and New York) have laws requiring the installation of seat belts on large school buses. California is the only state to require the installation of 3-point belts, while the other states only require lap belts. New York has required seat belts since 1987 and New Jersey since 1992. Neither New York nor New Jersey had data to show if installing seat belts has helped reduce the number of fatalities and/or injuries resulting from school bus accidents. However, the results of a 1998 school district survey by the New York State Education Department showed students wearing seat belts has provided other benefits including less fighting and physical contact, a quieter trip with less confusion, and fewer distractions for the driver, resulting in an overall safer trip for all students.

Most school officials oppose mandating seat belts on school buses

According to DESE school transportation officials, seat belts should be used to properly restrain 3 and 4 year old children as the law currently requires. In addition, the officials said parents who believe buses should have seat belts are usually satisfied when the concept of compartmentalization, which involves the use of high back heavily padded seats, is explained to them. They also noted that state law requires the agency to fully fund any required equipment such as seat belts, and that such additional funding would likely not be possible with the current budget deficits.

Most officials from 28 school districts and bus companies we visited were also opposed to mandating the installation of seat belts in all buses. Officials cited such reasons as most students would refuse to wear the seatbelts, many students would use seat belts as weapons, and seat belts would require them to buy more school buses. A board member of the Missouri School Bus Contractors Association said they support the National Highway Transportation Safety Administration's position on seat belts in school buses, which states the federal government would not require seat belts in school buses nationally.

A National Association of State Directors of Pupil Transportation Services (association) published paper states there is a widely held belief that all motor vehicles should be equipped with some form of restraint system. This belief is reinforced by strong, continued efforts to encourage everyone to "buckle up" in their motor vehicles. Based on the National Highway Traffic Safety Administration study, it appears the installation of 3-point seat belts in school buses would provide some small, incremental safety benefits. However, as noted in the report, the data and science does not support a mandate for 3-point belts in school buses. Nevertheless, the association recognizes the public expects school buses to be as safe as possible and the public believes 3-point belts should be installed in all new school buses. Accordingly, if funding were made available for the installation of 3-point belts in school buses, the association would support their installation. However, unless sufficient funding is made available to address all areas of school bus and pupil transportation safety, the association believes the same funds may be used in other areas of school bus and pupil transportation with greater potential safety benefits.

Conclusion

Child safety should be the utmost concern while they are being transported to and from school. The issue of seat belts on school buses is a much debated topic and the subject of a recent national report. While pros and cons exist to requiring seat belts on school buses, cost is usually the prevailing argument over reducing potential injuries to children. Other states are debating this issue and at least one, California, is implementing legislation requiring 3-point belts.

The national report shows that mandating 3-point belts on all school buses could help prevent fatalities and injuries for some children, but it is not possible to quantify with any precision the extent 3-point belts would reduce fatalities and injuries on Missouri school buses. However, due to the increased costs to acquire school buses with 3-point belts, and an associated reduction in seating capacity, mandating 3-point belts in all school buses could increase the risk of injuries to other children by eliminating some school bus transportation. The study concluded the overall potential benefit of requiring 3-point belts in large school buses did not warrant a federal standard mandating them.

Missouri data is not available to fully assess the cost of 3-point seat belts on school buses. DESE could collect additional data on the number of large school buses operating in the state and the children transported. This data could be used to help the General Assembly weigh the cost of 3-point seat belts on school buses and, if it were mandated in Missouri, weigh options for implementing it.

Recommendation

We recommend the Commissioner, Department of Elementary and Secondary Education:

3.1 Collect statewide data on school bus seating capacity and utilization by type of bus to calculate the potential cost of 3-point seat belts in all state school buses.

Department of Elementary and Secondary Education Comments

3.1 The Department will take this recommendation under advisement.

SCOPE AND METHODOLOGY

This appendix discusses our methodology for assessing school bus safety in Missouri.

To assess bus driver background screening, we interviewed Department of Revenue (DOR) and Missouri State Highway Patrol (highway patrol) officials regarding licensing procedures. We also obtained and reviewed state laws and regulations that govern bus driver licensing to include requirements for criminal history background screenings. To determine if drivers with current school bus permits had disqualifying criminal histories, we obtained statistical data on bus drivers in DOR's information system and developed analyses based on data provided. We used data provided (21,004 bus driver names), to compare to the Department of Social Services' (DSS) database of cases of neglect and abuse to determine if matches existed. To accomplish this work, we obtained the assistance of DSS information systems officials in matching the two databases.

We also obtained assistance from the highway patrol criminal records division and the Kansas City police department in researching their criminal history databases to determine if they had matches to bus driver names submitted to them. In addition, to determine if DOR had submitted the names of all bus driver applicants to the highway patrol for background clearance checks, we selected a sample of bus driver names and compared them to DOR's bus driver applicant database, which shows when names were submitted and responses the highway patrol provided.

To assess the timeliness and effectiveness of mandatory school bus safety inspections, we interviewed Department of Elementary and Secondary Education (DESE) and highway patrol officials regarding inspection procedures, policies, and practices. We also reviewed state laws and regulations that govern school bus inspections. To obtain first-hand knowledge of inspections, we visited 5 of the highway patrol's 9 regional troops located in Lee's Summit (Kansas City area), St. Louis, Springfield, Poplar Bluff, and St Joseph, as well as school districts and bus companies. We visited 28 school districts and bus companies to observe school bus inspections and the condition of buses; review inspection records; and interview transportation and maintenance officials. To determine inspection results, we analyzed highway patrol inspection records, for 2000, 2001, and 2002, in addition to highway patrol spot inspection results. As a method of comparison, we contacted the eight states surrounding Missouri—Iowa, Nebraska, Kansas, Oklahoma, Arkansas, Tennessee, Kentucky, and Illinois—and obtained information regarding their laws, policies, and practices of performing school bus inspections.

To assess the need for and safety impact of three-point seatbelt systems in all school buses, we interviewed DESE officials and obtained their views on the need for and the benefit of requiring seatbelts in all school buses. We also reviewed current laws and policies regarding seatbelt requirements for Missouri buses. To obtain a national perspective on the requirement for and use of seatbelts in school buses, we contacted the eight states surrounding Missouri and several states with seatbelt requirement laws—New York, New Jersey, California, Florida. In addition, we obtained information from a national student transportation safety organization and we reviewed the latest National Highway Traffic Safety Administration school bus safety report. The report

APPENDIX I

addressed the use of seatbelts in school buses and we interviewed an administration official involved with the study, to obtain first hand knowledge of the agency's perspective on the need for and benefit of seatbelts in buses.

We contacted officials at the Missouri Safety Center at Central Missouri State University, the Missouri School Bus Contractors Association, the Missouri Safety Council (private non-profit organization), school districts, and bus companies to obtain a perspective on the need for seatbelts from within the state. Overall, we visited or contacted a total of 31 school districts, bus companies, and state level organizations. To obtain estimates of potential costs to install seatbelts in buses we contacted school bus and school bus seat manufacturers regarding cost and other issues surrounding the installation of 3-point belts in large buses. The manufacturers provided capacity reduction and cost information related to installing 3-point belts.

We obtained formal comments on a draft of this report from the officials responsible for the DESE, DOR, and the highway patrol, and included the comments in Appendix II. We conducted our work between July 2002 and January 2003.

AGENCY COMMENTS

BOB HOLDEN



CAROL RUSSELL FISCHER DIRECTOR OF REVENUE

MISSOURI DEPARTMENT OF REVENUE POST OFFICE BOX 311 JEFFERSON CITY, MISSOURI 65105-0311 PHONE: (573) 751-4450 FAX: (573) 751-7150

WEB SITE: www.dor.state.mo.us
E-MAIL: dormail@mail.dor.state.mo.us

March 21, 2003

Mr. Kirk Boyer, Director of Audits Missouri State Auditor's Office Harry S Truman State Office Building, Room 880 Jefferson City, MO 65101

Dear Mr. Boyer:

Thank you for your recent review of the Department of Revenue's (department) school bus permit issuance process. Please find below the department's response to your recommendations:

1.3 Revise the school bus permit application form to require applicants to report whether they are currently charged with any disallowable offenses, including the date and location of the charges, and to provide DOR current information on the status of their changes.

The department is agreeable to changing the form; however, disclosure of the information is dependent on self-reporting by the applicant. The department has no enforcement power to ensure current charges are reported. Further, the department may only deny a school bus permit on a plea or finding of guilty.

2.2 Improve the school bus registration system to accurately capture the current registration status for buses transporting children throughout the state.

The department maintains an accurate and reliable General Registration System, as it is our responsibility to update the system with information provided to us by vehicle owners. The department relies on vehicle owners to voluntarily notify us when selling or trading a vehicle, so that the registration system can remain current. A change in Missouri law would be necessary to require vehicle owners to notify the department when they sell or trade a vehicle out-of-state. This would allow the department to track all vehicles more thoroughly.

*** Missouri Quality Award Winner ***

Mr. Kirk Boyer, Director of Audits March 21, 2003 Page 2

The department will provide the Missouri State Highway Patrol (MSHP) with a list of current and expired vehicle registrations for each school bus company for use in conducting inspections. The MSHP could use this list to document any school buses with noncurrent registrations. This will assist the department in updating our registration system and ensuring the school bus registration information remains current.

If you have any questions or concerns related to the responses above, please contact Kim Lauer at (573) 751-8255, or me.

Sincerely,

Carol Russell Fischer

Cand Rull Lasiher

CRF/KL/jls

Bill Perkins
Patricia Churchill
Jessica Robinson
Raymond Hune
Rich Lamb
Jerry Laughlin
Pat Libbert
Lisa Haynes
Norma Hensiek
Waylene Hiles
Kim Lauer



Department of Public Safety

An Internationally Accredited Agency

MISSOURI STATE HIGHWAY PATROL

Colonel Roger D. Stottlemyre, Superintendent

Bob Holden Governor

1510 East Elm Street
Post Office Box 568
Jefferson City, MO 65102-0568
Phone: (573) 751-3313 (V/TDD) • FAX: (573) 751-9419

Charles R. Jackson Director

March 18, 2003

Honorable Claire C. McCaskill Auditor of Missouri State Capitol, Room 224 Jefferson City, MO 65101

Dear Auditor McCaskill

This correspondence is in regard to the draft of the results of the performance audit concerning school bus safety recently completed by your office. This response will be in compliance with the requests in the cover letter of March 7, 2003, which accompanied the draft. I will address the three sections of the draft separately by listing the section, the recommendation made in the draft, and then providing my thoughts regarding each recommendation.

1. State Laws and Incomplete Statewide Criminal Information Allowed Convicted Felons to Obtain School Bus Permits

Recommendations:

1.1 Require current and potential school bus drivers to submit fingerprints with their permit renewal applications or first-time permit applications.

Proposed legislation has been introduced in the 2003 session to require criminal fingerprint background checks to be completed on individuals applying for school bus permits. The proposed language is included in House Bill 582 and Senate Bill 543.

1.2 Require school bus operators to submit the names and other necessary information of their drivers to DOR every six months to verify the validity of bus driver permits.

Even though this recommendation is a good concept, it would be an extremely arduous task for both the Department of Revenue and the Missouri State Highway Patrol to monitor and ensure complete compliance. I would recommend the involved agencies explore the possibility of obtaining an applicant identification system that could automatically flag when subsequent criminal history information is received at the Central Repository that would allow the Patrol to forward critical information to DOR.

March 18, 2003 Honorable Claire C. McCaskill

I would like to comment on audit findings relating to the lack of complete statewide conviction information in the central repository, though it was not mentioned as a recommendation. Over the past ten years, all criminal justice agencies have been cooperatively working on the Criminal History Improvement Project. With the assistance of state and federal grant funding, the primary purpose of this project is to improve the completeness, accuracy, and timelines of criminal history information submitted to state central repositories that will ensure officer safety, as well as, the safety of the public. Two goals identified to achieve this mission were 1) Qualified training to criminal justice personnel in the aspects of criminal history reporting and 2) Interfacing criminal justice systems through enhanced technology. These goals will continue due to the change in personnel within criminal justice agencies and the development of improved technology. Criminal history information maintained in the central repository is only as good as what is submitted from law enforcement agencies, prosecuting attorneys, courts, and corrections.

2. Improvements are Needed in the School Bus Inspection Program

Recommendation:

2.1 Develop and implement a systematic spot inspection program designed to ensure school bus operators conduct quality inspections.

I certainly appreciate the fact that, along with this recommendation, the audit results included that spot checks of school buses are currently being conducted by our personnel. The recommendation, as listed above, will be given the appropriate consideration, and will be placed as an item on the agenda for the next School Bus Committee meeting.

3. Installing Lap/Shoulder belts on School Buses Could Improve Safety, But Cost Could Be Substantial

There are no recommendations for the Patrol to address.

I appreciate the opportunity to address the recommendations and other issues contained in the School Bus Safety performance audit draft. I feel the discussion that took place on February 28, 2003, regarding this matter was beneficial. The changes made to the draft subsequent to that meeting are appropriate. The consideration given to our concerns is appreciated.

Should you have further questions or concerns, please feel free to contact me.

Sincerely.

ROGER D. STOTTLEMYRE, Colonel

Superintendent

D. Kent King Commissioner of Education



P.O. Box 480 Jefferson City, MO 65102-0480 http://www.dese.state.mo.us

Missouri Department of Elementary and Secondary Education

Making a positive difference through education and service ---

March 20, 2003

Kirk R. Boyer Director of Audits Missouri State Auditor State Capitol, Room 224 Jefferson City, MO 65101

Dear Mr. Boyer:

The Department of Elementary and Secondary Education (DESE) has received and reviewed the draft School Bus Safety Audit Report. Only one recommendation requires a response from DESE. The recommendation and response follow:

Recommendation 3.1:

Collect statewide data on school bus seating capacity and utilization by type of bus to calculate the potential cost of 3-point seat belts in all state school buses.

Response:

The Department will take this recommendation under advisement.

Thank you for your time in offering recommendations for a safer school transportation program.

Sincerely,

c: Gerri Ogle

Tom Quinn Andrea Beck

Mark Van Zandt